



Range: SG-11
Exempt: Non-Exempt
Date: April 23, 2010

WASTEWATER PLANT LABORATORY TECHNICIAN

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

To perform testing, chemical analysis, and semi-skilled labor in the maintenance, operation, repair and related service activities for the City wastewater facilities; to assist the Chief Plant Operator in maintaining the operational efficiency of wastewater systems and facilities and to perform a variety of related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Chief Plant Operator.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS--*Essential and other important responsibilities and duties depending on which main function of the department you may be assigned, may include, but is not limited to, the following:*

Essential Functions:

1. Coordinate and perform chemical, physical, and bacteriological analysis of water, wastewater, biosolids, and a variety of environmental matrices; apply and interpret laboratory test results and adjust process control measures as deemed necessary under the supervision of the Chief Plant Operator.
2. Under the direct supervision of the Chief Plant Operator, assist in operation and control of wastewater treatment processes of the type used by the City of Sedona in accordance with good modern practice and strategies.
3. Manage and conduct sampling programs to ensure permit testing requirements are completed and in compliance; maintain records of laboratory test results and process control parameters; prepare daily, monthly, and annual process control reports; assist Chief Plant Operator in completing quarterly and annual regulatory compliance reports.
4. Interpret test results and prepares comprehensive analyses.
5. Read and interpret regulatory permits as relates to testing requirements.
6. Operate, maintain, and repair laboratory equipment including, but not limited to spectrophotometer, pH meter, turbidimeter, analytical balance, BOD meter, furnace, autoclave, water bath, incubator, microscope, oven, and related equipment.

7. Manage laboratory supply inventory and identify necessary supplies and equipment to be ordered.
8. Interface with Supervisory Control and Data Acquisition (SCADA) system in equipment operation and process control.
9. Calibrate various pieces of process control instrumentation in the plant (i.e. DO probes, DOB probes, flow meters, air monitors, etc.) and maintain the results of the calibrations in control charts.
10. Ability to work in organized team efforts and assist in problem solving work related issues for continuous improvement in work efforts.
11. Perform general housekeeping duties in the laboratory and operational areas.
12. Assist in emergency response situations and confined space entries.

Marginal Functions:

1. Provide responsible staff assistance to Chief Collections Operator.
2. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Operational characteristics of wastewater systems.
 Understand the principles of water and wastewater analysis
 Operation, maintenance, and calibration of laboratory equipment.
 City, state, and federal rules and regulations governing the treatment of wastewater.
 Occupational hazards and safety precautions pertaining to all phases of maintenance and operations in wastewater facilities and laboratories.
 General lab safety work practices.
 Standard methods for waste discharge practices including onsite disposal, permitted discharge, recharge and reclamation.

Ability to:

Proficiently use computers and create and enter data into spreadsheets, graphs, and databases.
 Compile and enter technical and statistical data into computers in order to prepare clear and concise reports.
 Perform necessary laboratory analysis as required.
 Organize and file lab reports and test results.
 Determine and initiate process control procedures necessary for efficient operation of the wastewater treatment process.
 Read and write English proficiently at a technical level
 Work independently in the absence of supervision.
 Understand and follow oral and written instructions.
 Communicate clearly and concisely, both orally and in writing in English.
 Maintain effective interaction and communication with others.
 Maintain effective audio/visual discrimination and perception to the degree necessary for the successful performance of assigned duties.
 Compile and enter technical and statistical data into computers in order to prepare clear and concise reports.
 Prepare and present written and oral reports to supervisor and others, as directed.

Report operating conditions and problems, and recommend or install appropriate solutions.
Establish and maintain effective working relationships with city officials, other employees, and deal tactfully with the general public and outside agencies.
Respond to an emergency situation on or off the plant site with the ability to communicate via two-way radio and emergency pager. Perform in adverse weather conditions and exposure to toxins associated with wastewater.
Work weekends when directed.
Acquire necessary training for continuous improvement of technical skills.

Experience and Training Guidelines

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. Typical ways to obtain the knowledge and abilities would be:

Experience:

One year of college classes including chemistry, biology, or other science course, combined with one-year experience working in a wastewater treatment facility.

Laboratory background with previous experience in operating and maintaining wastewater/water treatment systems. One year of increasingly responsible experience in a chemistry, microbiology, bacteriology, or related field and laboratory analysis is desirable.

Training:

Associates of Arts (AA) degree from an accredited college or university with major course work in chemistry, biology, environmental engineering, or a related field or equivalent experience.

License

Possession of, or ability to obtain, valid Arizona driver's license.

WORKING CONDITIONS

Environmental Conditions:

Wastewater treatment plant environment; exposure to noise, grease, smoke, fumes, gases, electrical energy; work in or with water; work on slippery or uneven surfaces. Position may be required to wear respirator to complete a portion of its position accountabilities.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for moderate or light lifting (at least 20 lbs); standing, walking or sitting for prolonged periods of time; operating motorized equipment; climb ladders, crawl and bend; general manual dexterity; auditory ability to hear such things as motor or pump sounds, and alarms.